

**IN THE CLAIMS**

For the convenience of the Examiner, all pending claims of the present Application are shown below in numerical order whether or not an amendment has been made and applying the revised amendment practice of 37 CFR 1.121.

**Claims 1-39 (Cancelled)**

40. **(New)** A medical implant, comprising:

a body adapted for implantation into a sinus tarsi of a subtalar joint in a human foot, the body having a length, the body being tapered along at least a majority of the length;

at least one continuous and uninterrupted thread formed around an exterior surface of the body and extending at least a majority of the length of the body, the at least one thread being configured to at least partially prevent displacement of a talus without penetrating bone, the at least one thread being tapered with respect to a longitudinal axis of the body, the taper of the at least one thread being generally conical; and

a majority of the at least one thread having a substantially constant thread height and a substantially constant pitch.

41. **(New)** The medical implant of Claim 40, wherein the taper of the body is substantially equal to the taper of the at least one thread.

42. **(New)** The medical implant of Claim 40, wherein a majority of the taper of the at least one thread is uniform.

43. **(New)** The medical implant of Claim 42, wherein the uniform taper of the at least one thread measures between 15 degrees and 20 degrees.

44. **(New)** The medical implant of Claim 42, wherein the uniform taper of the at least one thread measures approximately 18 degrees.

45. (New) The medical implant of Claim 43, further comprising an engagement formed in a trailing end of the body and adapted to receive a tool for rotating the implant about a longitudinal axis of the implant for implantation of the implant into the sinus tarsi.

46. (New) The medical implant of Claim 45, wherein the majority of the at least one thread further includes a crest width, wherein the ratio of the crest width to the thread height is at least 0.3.

47. (New) The medical implant of Claim 45, wherein the majority of the at least one thread further includes a crest width, wherein the ratio of the crest width to the pitch is at least 0.25.

48. (New) The medical implant of Claim 45, wherein the majority of the at least one thread further includes a crest width, wherein the ratio of the crest width to the pitch is between 0.25 and 0.4.

49. (New) The medical implant of Claim 45, wherein the majority of the at least one thread further includes a thread root width measuring between 0.020 inches and 0.040 inches.

50. (New) The medical implant of Claim 45, wherein the majority of the at least one thread further includes:

a thread angle measuring approximately 60 degrees;

a crest width, wherein the ratio of the crest width to the thread height is at least 0.3;

and

a thread root width measuring between 0.020 inches and 0.040 inches.

51. (New) The medical implant of Claim 50, wherein:

the uniform taper of the at least one thread measures approximately 18 degrees;

the thread height is approximately 0.032 inches;

the root width is approximately 0.030 inches; and

the pitch is approximately 0.090 inches.

52. (New) The medical implant of Claim 50, wherein:  
the uniform taper of the at least one thread measures 18 degrees;  
the thread height is 0.032 inches;  
the root width is 0.030 inches; and  
the pitch is 0.090 inches.

53. (New) The medical implant of Claim 50, wherein:  
the uniform taper of the at least one thread measures approximately 18 degrees;  
the thread height is approximately 0.041 inches;  
the root width is approximately 0.030 inches; and  
the pitch is approximately 0.100 inches.

54. (New) The medical implant of Claim 50, wherein:  
the uniform taper of the at least one thread measures 18 degrees;  
the thread height is 0.041 inches;  
the root width is 0.030 inches; and  
the pitch is 0.100 inches.

55. (New) A method of forming a medical implant, comprising:  
providing a body adapted for implantation into a sinus tarsi of a subtalar joint in a human foot, the body having a length, the body being tapered along at least a majority of the length; and

forming at least one continuous and uninterrupted thread around an exterior surface of the body, the at least one thread extending at least a majority of the length of the body, the at least one thread being configured to at least partially prevent displacement of a talus without penetrating bone, the at least one thread being tapered with respect to a longitudinal axis of the body, the taper of the at least one thread being generally conical, a majority of the at least one thread having a substantially constant thread height and a substantially constant pitch.

56. (New) The method of Claim 55, wherein the taper of the body is substantially equal to the taper of the at least one thread.

57. (New) The method of Claim 55, wherein a majority of the taper of the at least one thread is uniform.

58. (New) The method of Claim 57, wherein the uniform taper of the at least one thread measures between 15 degrees and 20 degrees.

59. (New) The method of Claim 57, wherein the uniform taper of the at least one thread measures approximately 18 degrees.

60. (New) The method of Claim 58, further comprising forming an engagement in a trailing end of the body, the engagement being adapted to receive a tool for rotating the implant about a longitudinal axis of the implant for implantation of the implant into the sinus tarsi.

61. (New) The method of Claim 60, wherein the majority of the at least one thread further includes a crest width, wherein the ratio of the crest width to the thread height is at least 0.3.

62. (New) The method of Claim 60, wherein the majority of the at least one thread further includes a crest width, wherein the ratio of the crest width to the pitch is at least 0.25.

63. (New) The method of Claim 60, wherein the majority of the at least one thread further includes a crest width, wherein the ratio of the crest width to the pitch is between 0.25 and 0.4.

64. (New) The method of Claim 60, wherein the majority of the at least one thread further includes a thread root width measuring between 0.020 inches and 0.040 inches.

65. (New) The method of Claim 60, wherein the majority of the at least one thread further includes:

a thread angle measuring approximately 60 degrees;

a crest width, wherein the ratio of the crest width to the thread height is at least 0.3;

and

a thread root width measuring between 0.020 inches and 0.040 inches.

66. (New) The method of Claim 65, wherein:

the uniform taper of the at least one thread measures approximately 18 degrees;

the thread height is approximately 0.032 inches;

the root width is approximately 0.030 inches; and

the pitch is approximately 0.090 inches.

67. (New) The method of Claim 65, wherein:

the uniform taper of the at least one thread measures 18 degrees;

the thread height is 0.032 inches;

the root width is 0.030 inches; and

the pitch is 0.090 inches.

68. (New) The method of Claim 65, wherein:

the uniform taper of the at least one thread measures approximately 18 degrees;

the thread height is approximately 0.041 inches;

the root width is approximately 0.030 inches; and  
the pitch is approximately 0.100 inches.

69. (New) The method of Claim 65, wherein:  
the uniform taper of the at least one thread measures 18 degrees;  
the thread height is 0.041 inches;  
the root width is 0.030 inches; and  
the pitch is 0.100 inches.